

Ohio's Surface Water Monitoring Design in the 3rd Millennium: The Age of the TMDL

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Aquatic Bioassessments by Ohio EPA

The Integrated Biosurvey

Where

- Mainly rivers, streams, and small waterways
- In use and development for Lake Erie, Ohio River, and wetlands

What

- Fish, macroinvertebrates, physical habitat
- Sediments, water quality, fish contamination
- Chlorophyll

Why

- Provide empirical information for water quality management and decision-making
- Determine status of Ohio's aquatic resources
- Assure that waters are correctly classified

THE FRAMEWORK:
Ohio's Watershed Assessment Units
(USGS 11-digit Hydrologic Units)



Ohio's Large River Assessment Units

(23 Rivers with > 500 mi² watersheds)

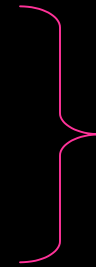


Ohio TMDL Process Overview

1. Design survey
2. Collect data
3. Assess data
4. Define goal
5. Develop targets
6. Select scenario
7. Prepare plan
8. Submit report
9. Implement internally
10. Implement externally
11. Annual validation
12. Check status



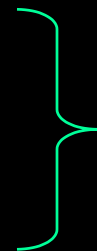
Assess



Develop



Implement



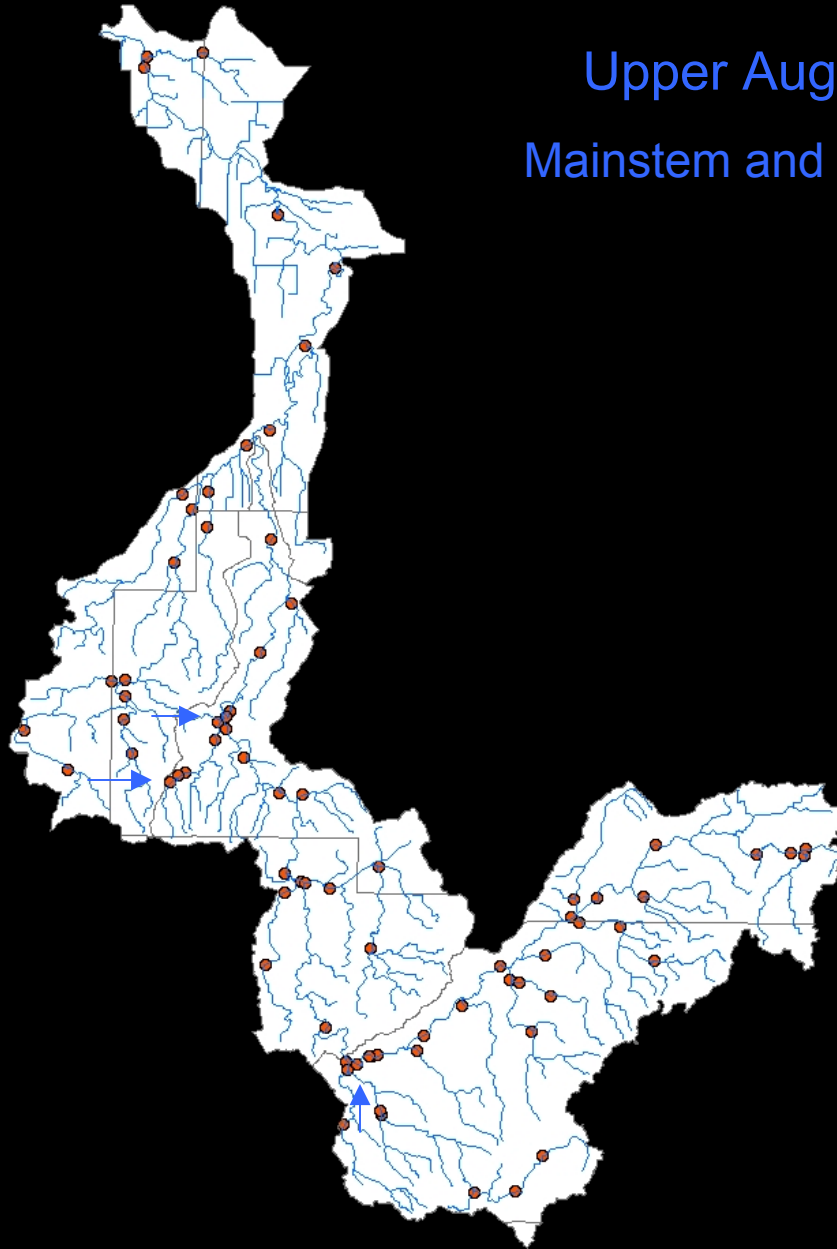
Validate

Upper Auglaize River, 1991
(Mainstem and 2 Tributaries - 21 Sites)



Upper Auglaize River, 2000

Mainstem and 25 Tributaries – 76 Sites



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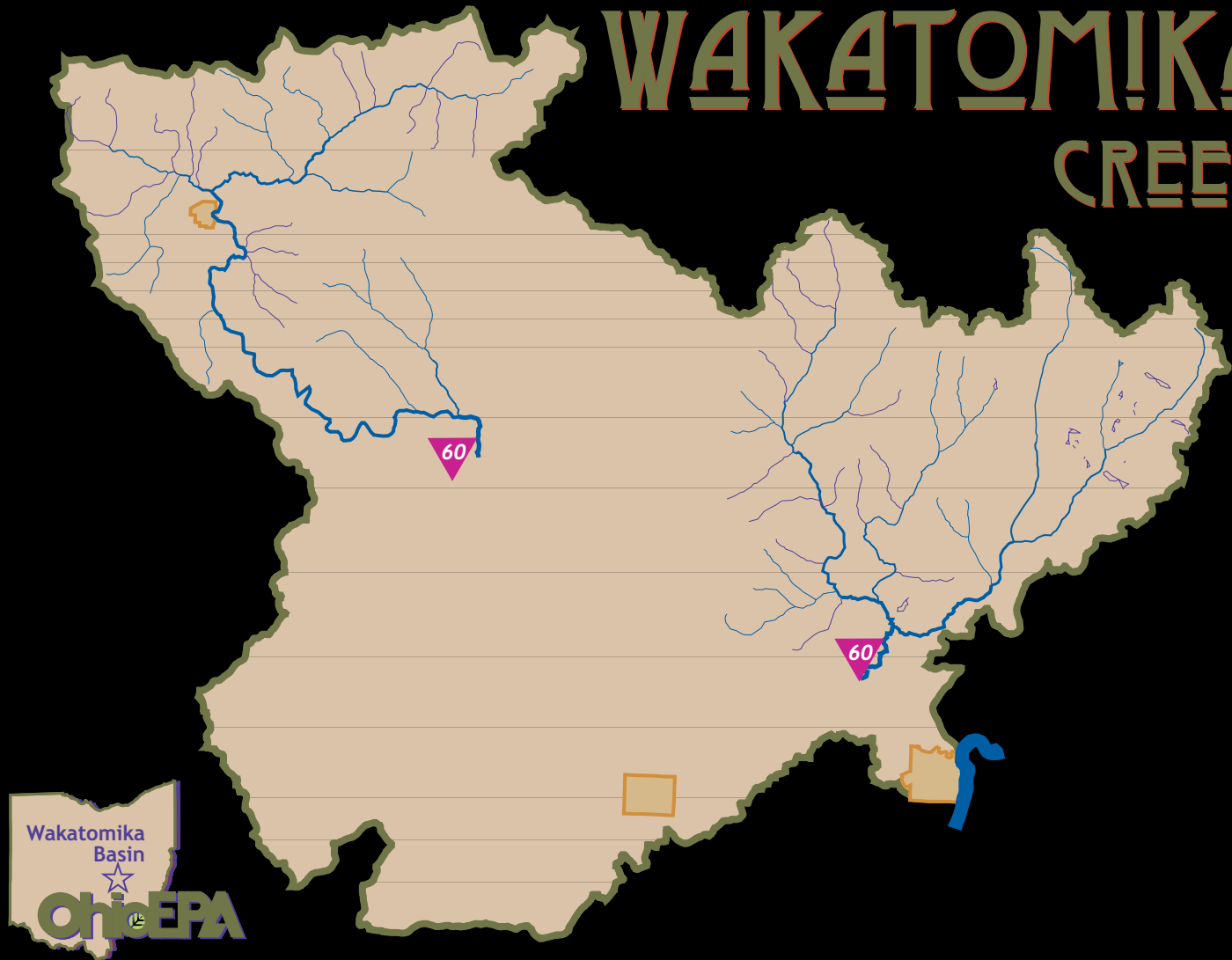
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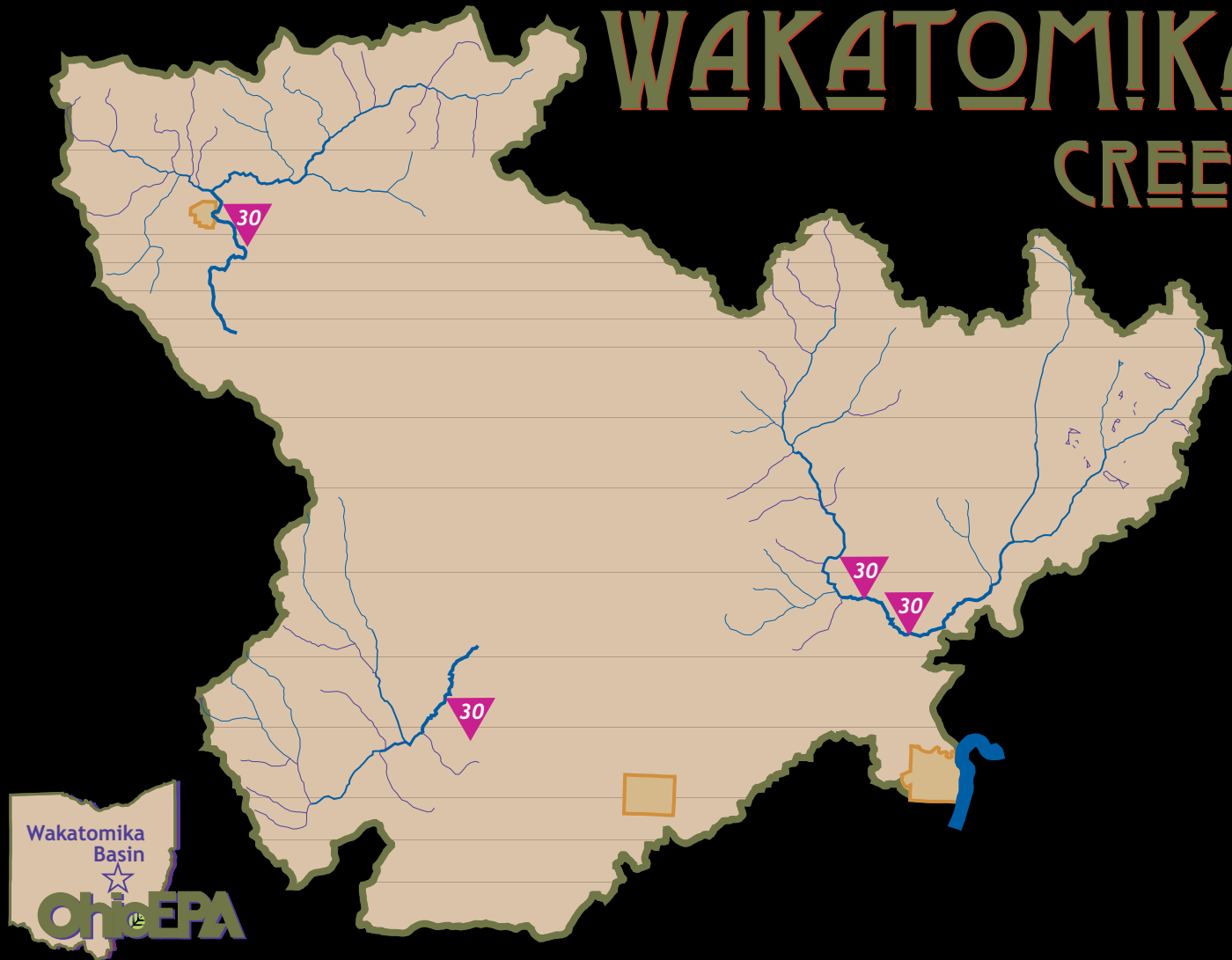
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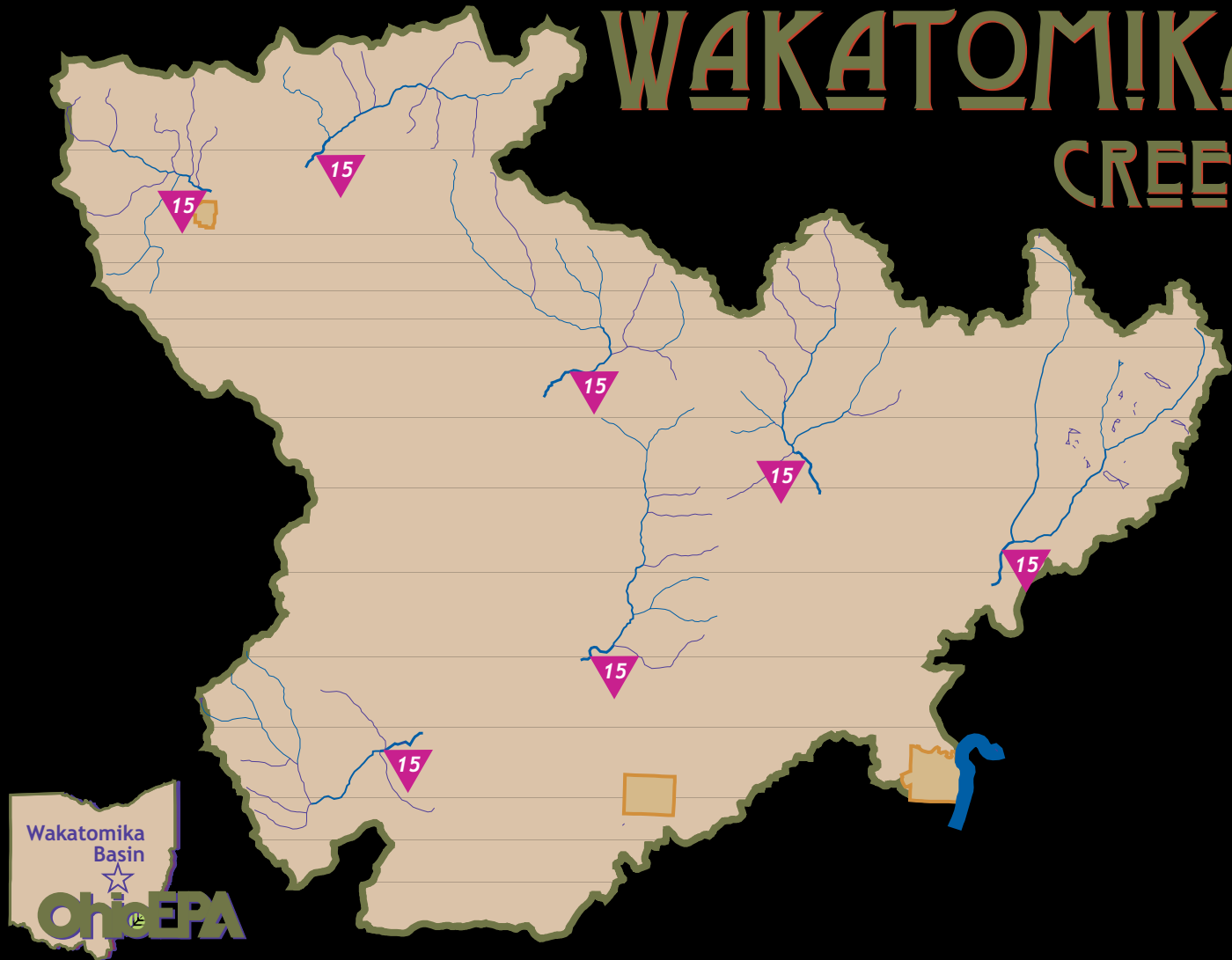
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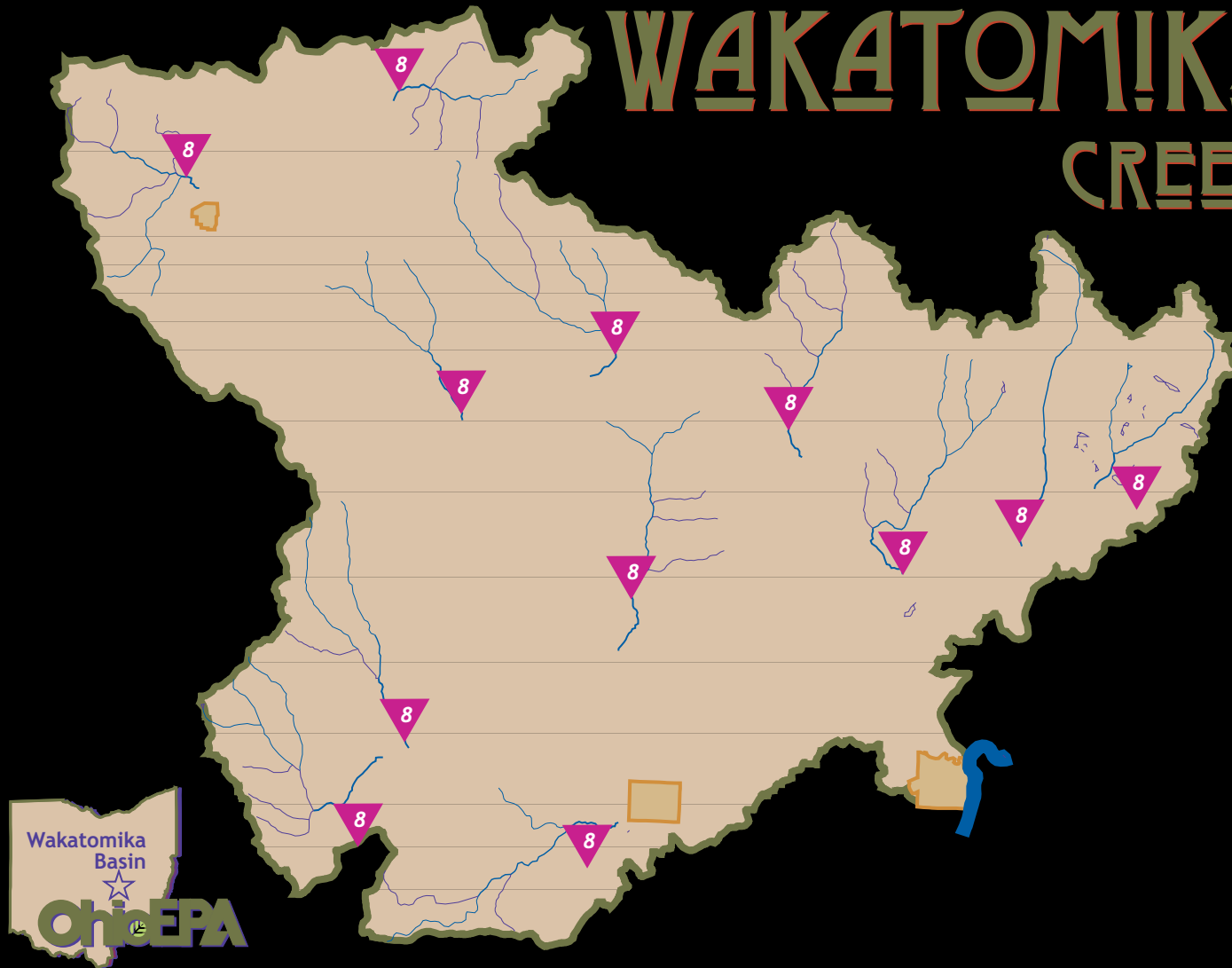
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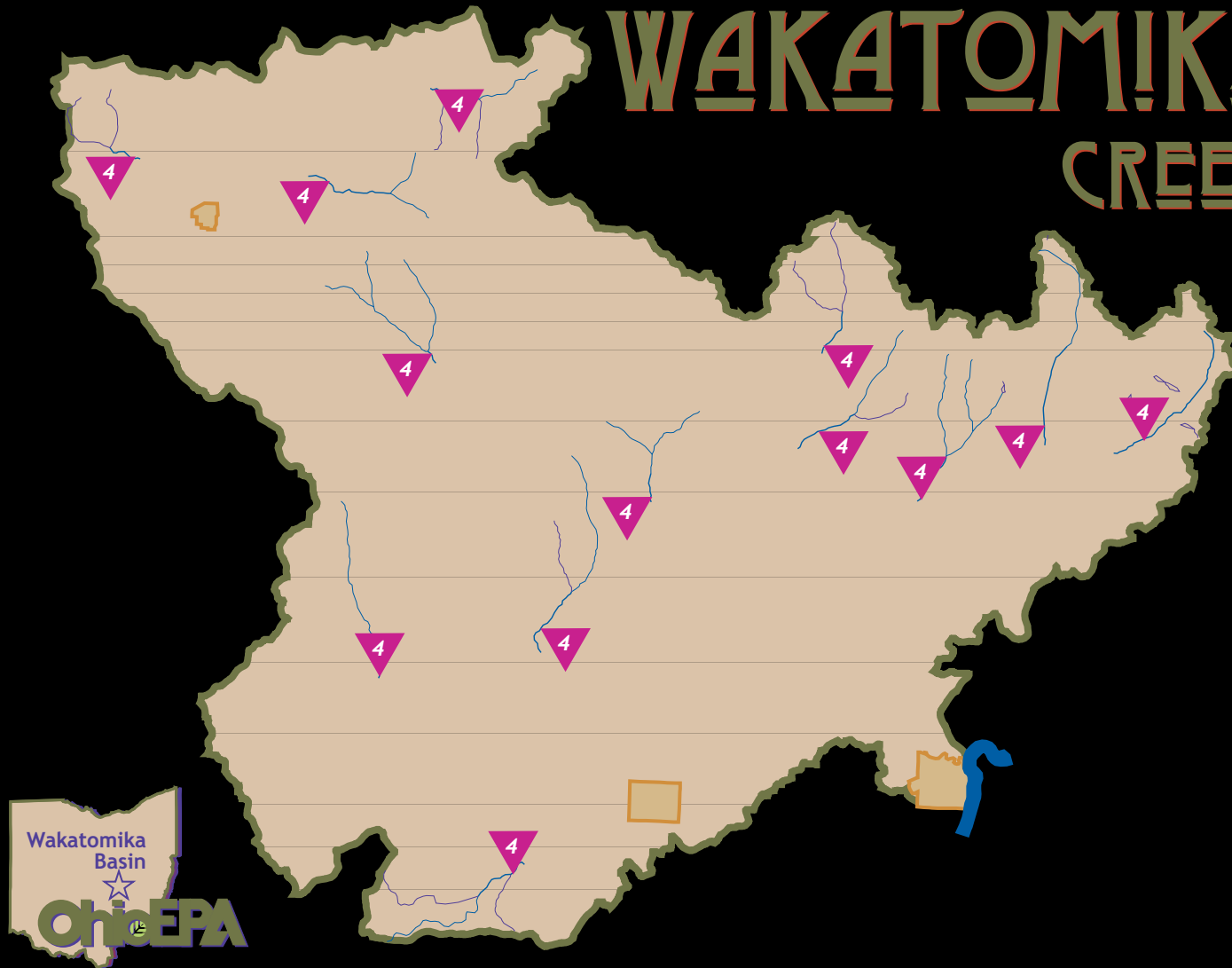
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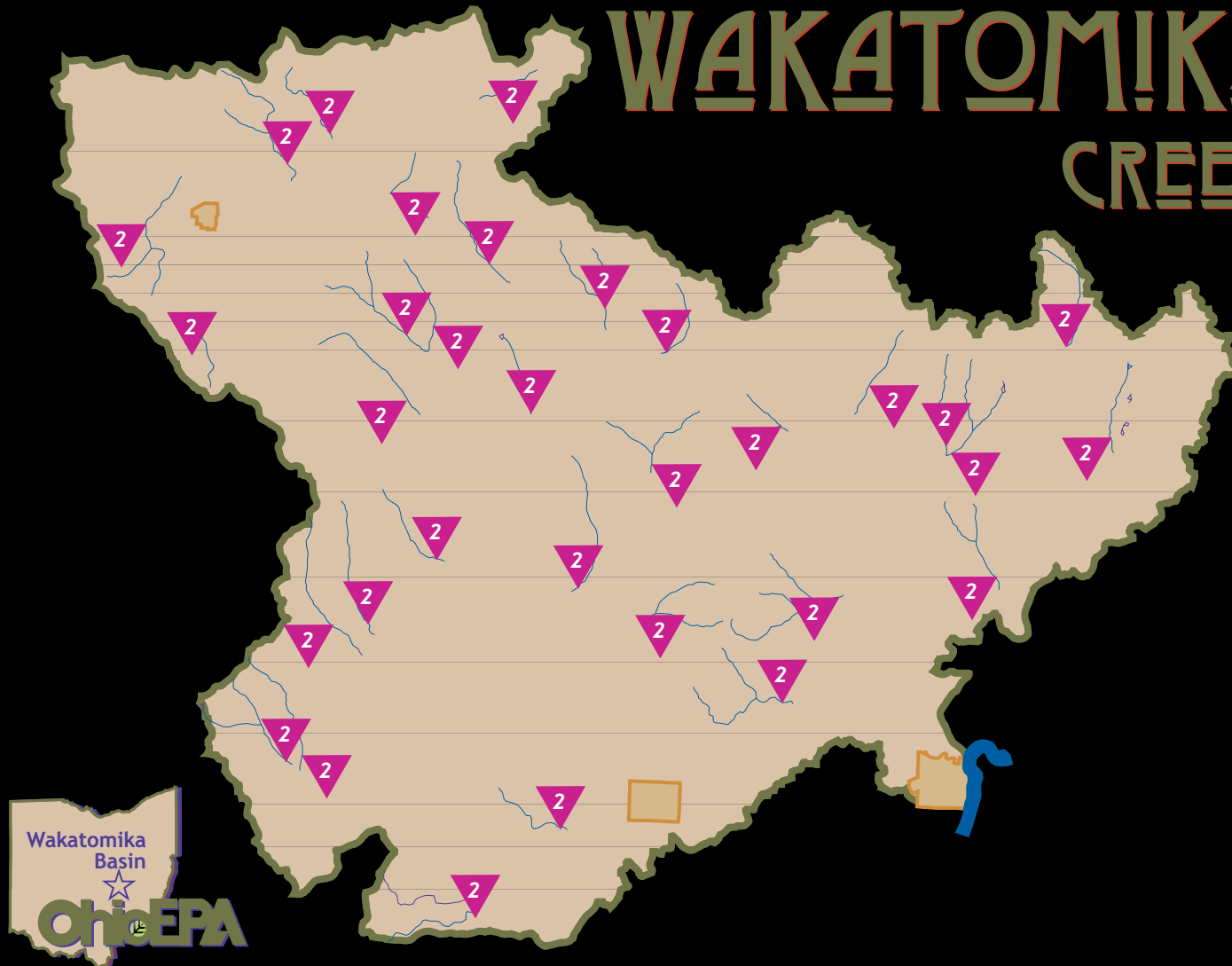
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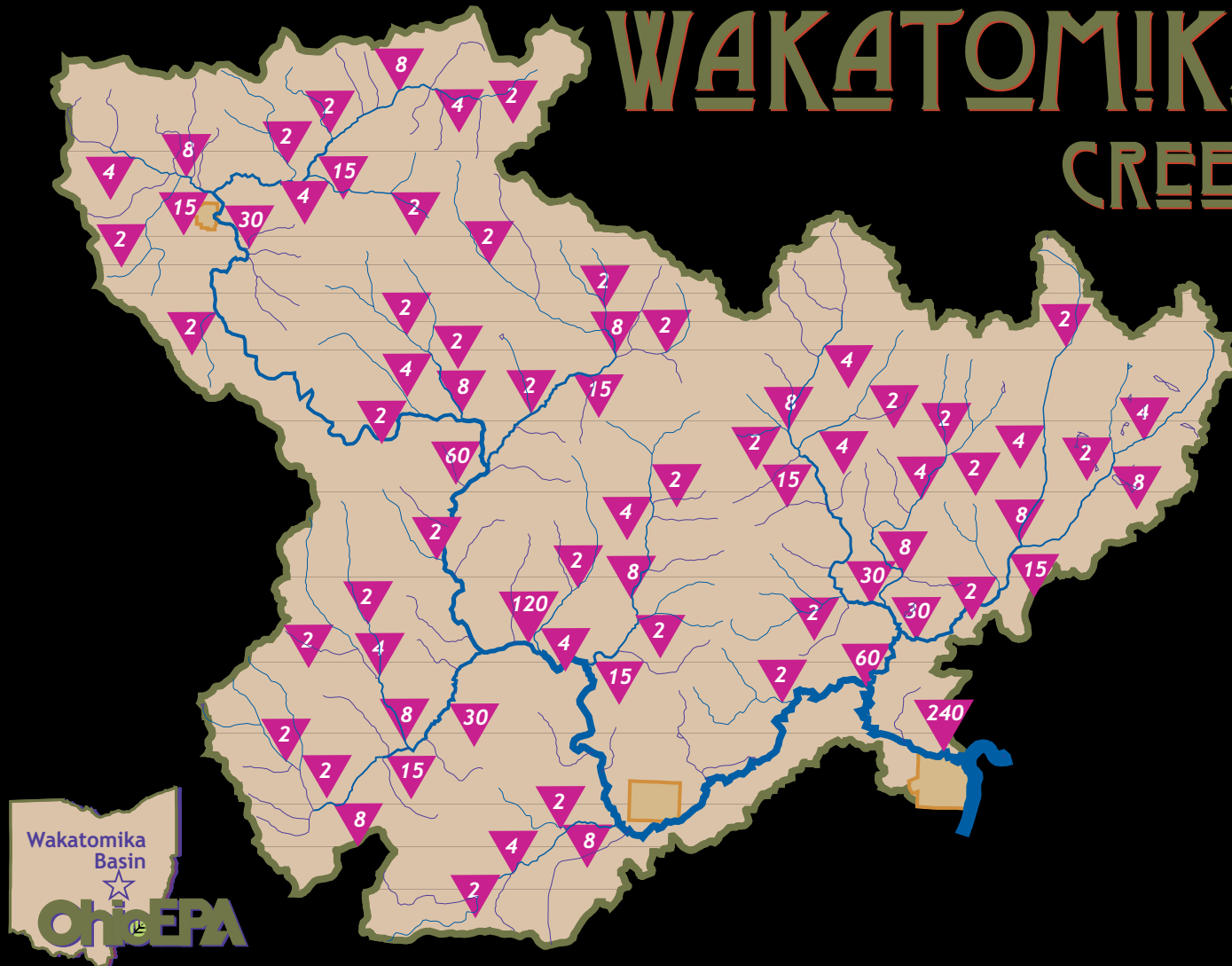
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